Examining Health Care in Canada, France, and the UK

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Many Americans are seeking solutions to the health care woes in their nation. Most are looking for solutions to provide coverage to the uninsured, some are concerned about the high cost of health care, and still others have concerns about other aspects of health care. A good number of Americans, including several prominent politicians and media figures, are looking to Canada and increasingly to other nations including France and the UK, for "universal" solutions to their woes.

Unfortunately, these nations' experiences bring cautionary tales of their own. Americans must be wary of adopting other nations' health insurance programs based only on an examination of the benefits they might bring. Or adopting them based only on a few small success stories trumpeted by supporters of these models.

Since the ultimate outcome of the health care debate in the United States will be determined by the voters, the courts, and the marketplace, it is important that those going to the polls or considering electing representatives in favour of a universal access or single-payer (government) insurance scheme know all the facts before making their decision. Indeed, no health care model is perfect and it is important to get beyond the politics and rhetoric to examine the evidence regarding health care in each of these three nations before determining whether its model is one worth considering.

This paper aims to provide that evidence by summarizing the relative performances of three health care programs that have appeared in recent campaigns as potential guides to reform: Canada, the UK, and France. The paper begins by asking a question too few Americans ask: are there really as many uninsured Americans as is often claimed? Having put the uninsured issue in context, the paper goes on to compare the relative performances of the health care models of these three nations along the dimensions of cost, access to health care, and quality of health care and considers whether any of them could serve as a good guide for health reform. A brief discussion on the US health care model's relative performance follows.

The Uninsured: Are there really more than 45 million?

The need for health care reform in the United States is often premised on the existence of over 45 million individuals who are unable to attain health insurance coverage. All too often, the size of the uninsured population in the United States goes unquestioned. However, upon closer examination, the uninsured population's size may not be large as many claim.

After looking carefully at the statistics on the uninsured population, it seems that there may be substantially fewer Americans in actual need of insurance than are commonly counted as uninsured. Notably Irvine *et al.* (2002) determined that a more accurate estimate of uninsured Americans was between 23 and 25 million in 1997 compared to a commonly cited estimate of 43 million. This was based on a calculation that started with a more precise measurement of the uninsured population than the one commonly cited and adjusted for: uninsured individuals who

were eligible for free public health insurance but who had not signed up¹, higher income Americans who may have chosen voluntarily to not buy health insurance, and illegal immigrants who may have been counted as uninsured². Importantly, these groups of individuals are included in the commonly cited estimates of the uninsured population. The estimate derived by Irvine *et al.* (2002) is well below the 43 million figure often cited in the media, which suggests that estimates of the uninsured population common in the media today are equally overstated.³

Clearly, the existence of the medically uninsured in the United States may not be of the magnitude that many believe it to be. However, it is also clear that there are still likely many Americans who need but cannot afford health care insurance. One commonly proposed solution to the remaining problem—though by no means the only one—is to create a mandatory universal insurance program that covers every American regardless of their health status or ability to pay.

An international comparison of health care systems

Many different types of universal programs exist in the developed world. At one end of the spectrum are programs with a state monopoly providing medically necessary hospital and physician services without any cost sharing. On the other end are programs that cover a broader range of health care goods and services but that do so through competing private insurers with varying co-pays/deductibles. Care is delivered in a competitive environment and users retain the option to finance care privately if they so desire. The models in Canada and the UK fall near the state monopoly end of the range, whereas the French model leans towards, but is still some distance from, the other end of the spectrum as it maintains an uncompetitive public insurance sector. The delivery of health care services in France remains competitive. Examining the performance of these models along the dimensions of cost, access, and quality can show clearly which of these models could serve as potential examples for health care reform and which models should not.

Since the debate in the United States is revolving around the issue of introducing mandatory universal access health insurance programs, and since a comparison of universal programs with non-universal programs is more an apples to oranges comparison, it is most relevant to consider the performance of these three nations against that of other health care models that endeavour to guarantee access to health care insurance regardless of ability to pay. These are the very comparisons that The Fraser Institute's Health Performance Studies department has been making for several years now in our *How Good is Canadian Health Care?* series using health care statistics from the Organisation for Economic Co-Operation and Development and the World Health Organization.

The Relative Performances of Canada, the UK, and France

¹ In the event of illness or injury, these uninsured individuals could likely have acquired public health insurance at no cost, particularly since Medicaid could apply retroactively to past health care costs.

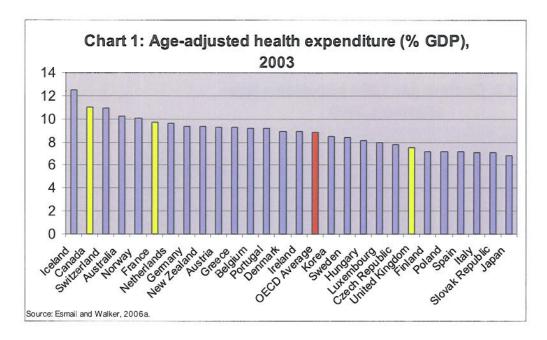
² Generally, universal access health insurance programs require legal residence as a prerequisite for coverage.

³ More recent appropriately of the universal extincts by Shirmer and Papers (2007) and Garley (2007) by

³ More recent examinations of the uninsured estimate by Skinner and Rovere (2007) and Graham (2007) have come to similar conclusions.

In any comparison of services, it is important to look at the cost of the service being delivered. To be clear, however, there is nothing fundamentally wrong with high health expenditures, unless those high levels of spending are tax-financed—high levels of taxation reduce economic activity and thus economic growth. Spending a lot of money on health care is, in essence, not all that different from spending a lot of money on a car or house. The important question is not how much did you spend, but whether you received value for money for those dollars. To continue the analogy: there is nothing wrong with spending \$150,000 on a luxury sports car, but there is something very wrong with getting a clunker at that price.

What often comes as a surprise to many Canadians, and may come as a surprise to some Americans as well, is that the Canadian model is not cheap. After accounting for Canada's relatively young population (the elderly require more care), Canada's total health care expenditures, in the most recent year for which comparable data are available, ranked second when compared with spending in other developed nations that also guarantee access to health insurance regardless of ability to pay. Only Iceland spent more on their universal access health care program than Canada (chart 1). Canada's age-adjusted health care expenditures, at 11.0 percent of GDP⁵, were 25 percent higher than health care spending in the *average* universal access health care nation (8.8%) and 47% higher than expenditures in the UK (7.5%). France's expenditure performance in 2003 was above average but below the top-ranked spenders (Esmail and Walker, 2006a).



What does this mean precisely? It means that Canada's health care spending outstrips that of most other nations that maintain universal access health insurance programs. It should also mean that, if Canada's model is a genuinely good one or even an average one, it should fare quite well

⁴ It should be noted that there is also a distinction between public and private expenditures on health care because of the differences in how they are raised and spent (Esmail and Walker, 2006a; Ramsay and Esmail, 2004).
⁵ GDP is the value of all final goods and services produced in a country.

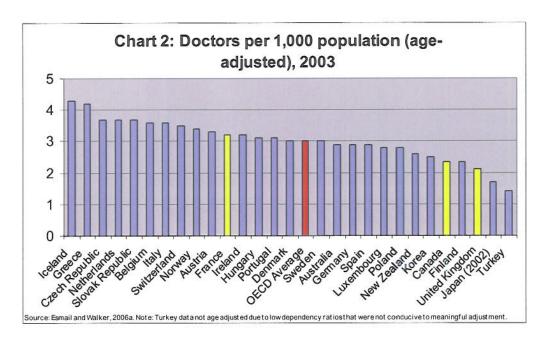
when compared to other nations in measures of accessibility and quality. Sadly, the reality is that the Canadian experience is quite the opposite: very poor access to reasonable quality care.

The French model on the other hand should be expected to perform well relative to other programs given its ranking in expenditures. UK's model, being a laggard in expenditure, should be expected to under-perform both Canada and France.

Access

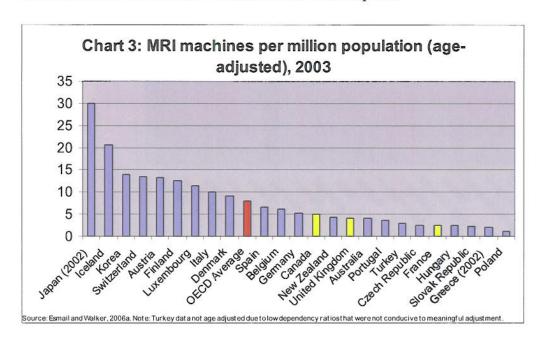
Access to health care differs significantly among developed nations, even among those who maintain universal access health insurance programs. In some nations, queues are virtually nonexistent, while in others queues for medically necessary care can stretch into months or even years for some medical conditions. Even among the three developed nations discussed in this brief, there are significant differences in access to physicians, technology, and treatment.

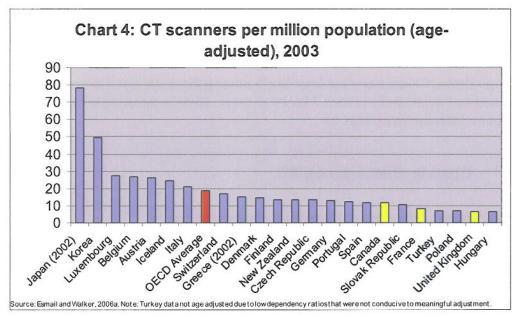
When it comes to physicians, Canada ranks near the bottom among developed nations who maintain universal access health care programs, just ahead of the UK in the age-adjusted number of physicians per 1,000 population. Conversely, France ranks above average which is more in keeping with its spending performance (chart 2). It is interesting to note that several studies have found a correlation between lower mortality and higher physician to population ratios in developed countries (see for example: Or, 2001; and Starfield *et al.*, 2005). This suggests that the relatively poor performances of Canada and the UK may be having a negative effect on health outcomes in those nations.



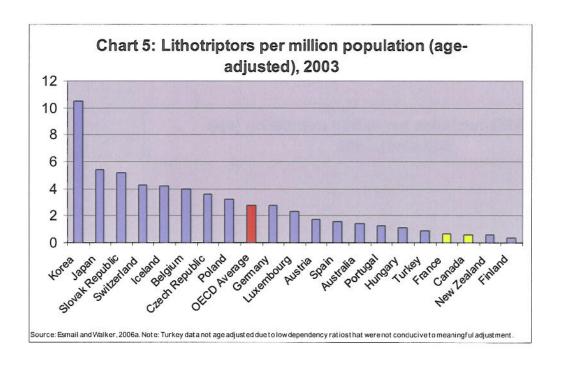
With respect to medical technology, all three nations perform relatively poorly when compared with other universal access nations. Specifically, Canada ranks 13th of 24 nations in the ageadjusted availability of MRI machines (chart 3), 17th of 23 in the age-adjusted availability of CT scanners (chart 4), and ties for second last of 20 nations for which data are available in the ageadjusted availability of Lithotriptors (a high-tech device used to break up stones in the body)

(chart 5). France ranks a relatively poor 19th, 19th, and 17th respectively. Finally, the UK ranks 15th and 22nd in the age-adjusted availability of MRI machines and CT scanners respectively while data is not available for the available of Lithotriptors.



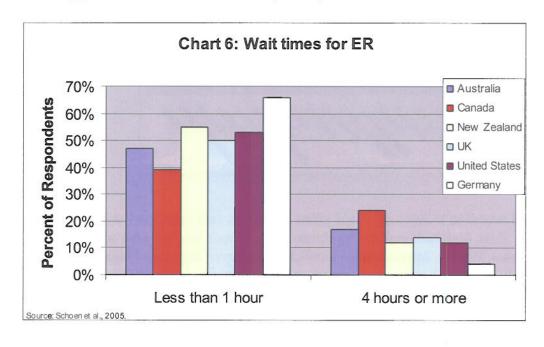


Importantly, reduced access to technology could affect the health care experience for individuals in need of treatment. First, high tech medical treatment is oftentimes less invasive and more comfortable for patients. Equally importantly, a smaller inventory of high tech diagnostic equipment may lead to delayed diagnoses as a result of long waits for access to necessary testing or lead to reduced use of high-tech diagnostic imagery in general which can have negative implications for both diagnosis and treatment.

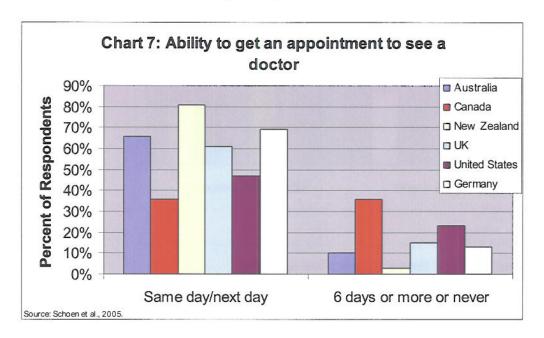


While these inventory statistics give some insight into the health care experience in these three nations, it is important to also examine the patient experience in terms of waiting times in order to judge directly individuals' access to that inventory of equipment and professionals. A recently published survey of "sicker adults" in six nations by the Commonwealth Fund (Schoen *et al.*, 2005) can provide some insight into wait times in both Canada and the UK. This evidence confirms the relatively poor access to care endured by Canadians and Britons.

With respect to ER wait times, Canadians were least likely among those surveyed to wait less than one hour for access and most likely to wait 4 hours or more. Britons meanwhile reported a middling performance on both metrics (chart 6).



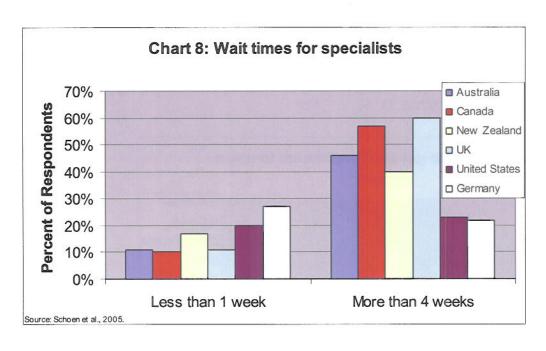
In terms of access to doctors when ill, Canadians once again were least likely to wait a relatively short period of time (appointment same day/next day) and most likely to wait inordinately long for access (6 days or more or never). As with ER access, the UK put in a middling performance which was better than Canada's (chart 7).

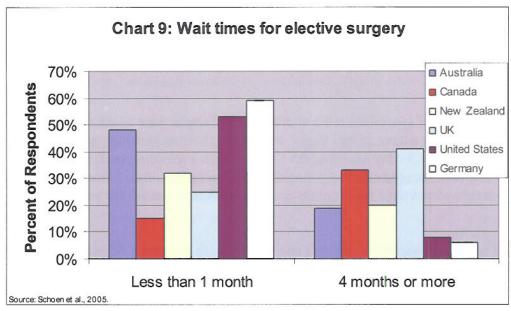


The results for access to medical specialists tell a similar story. Canada once again manages a bottom ranking performance for access in less than 1 week and a bottom ranking performance for waits of more than 4 weeks. On this measure, the UK manages a middling performance in terms of the share of respondents seen relatively quickly, but is actually outperformed by Canada in the share of respondents who waited inordinately long (more than 4 weeks) for access to a specialist (chart 8).

As was the case with access to specialists, Canada and the UK both manage a relatively poor performance in terms of access to elective surgery. For the share of respondents seen reasonably quickly (less than 1 month), Canada performs worst with the UK coming in second worst. On the other hand, for the share of respondents who wait inordinately long for access to care, the UK comes in last with Canada second to last (chart 9).

In summary, two of the worst performing nations in terms of wait times to access health care are Canada and the UK according to both this international survey and the available international evidence. Canada clearly performs at or near the bottom of the pack across several measures, which is surprising given its top of the pack spending performance. While the UK's poor access performance might be more understandable given its spending performance, it is still interesting to note that this low-spending nation in fact outperforms Canada on several metrics of wait times.





While directly comparable information on waits for care are not available for France, it should be noted that France is recognized as a nation whose universal access health care program delivers care without the systemic delays for care (waiting lists) that are commonplace in Canada and the UK. Other nations that deliver care without queues are Austria, Belgium, Germany, Japan, Luxembourg, and Switzerland (Siciliani and Hurst, 2003). This suggests that France's wait times performance is not likely to be too dissimilar from Germany's in the above charts.

Outcomes

On the health outcomes side, Canada's comparative performance improves but is still not exemplary while the UK remains near the bottom and France's performance is satisfactory. In

such comparisons it is important to consider health outcomes that are related to the effectiveness of the medical system. Population health statistics like infant mortality and life expectancy for example are determined by a number of factors that have a far greater impact than medical care such as public health policies including sanitation and infectious disease control, as well as general socio-economic and environmental conditions including poverty, nutritional habits, drug and alcohol abuse, crime, pollution, auto accident rates, and immigration. Therefore, health outcomes must be compared on the basis of statistics that more specifically reflect the relative performance of medical systems themselves.

With regard to the number of potential years of life lost to disease, a measure of a health system's ability to prevent death from disease at younger ages, Canada ranks 9th of 26 nations for which data are available. The UK ranks a low 20th, while France ranks 12th.

For mortality amenable to health care, or mortality that could (according to the medical literature) have been avoided through appropriate intervention, Canada ranks 4th of 23 nations for which data are available. France outperforms Canada, ranking 1st. The UK lags many nations at 17th.

In the incidence of mortality from breast cancer and colorectal cancer, Canada ranks 10th and 2nd of 28 developed nations with universal health programs respectively. France ranks 6th and 11th respectively, while the UK again lags many nations and places 15th and 13th respectively (Esmail and Walker, 2006a).

Clearly, Canada's performance on health outcomes is not poor. But it is also not outstanding. France manages a similarly mixed performance. Conversely, the UK puts in a relatively poor performance on outcomes measures, bringing to question why it might be considered as a reasonable model for health care reform.

Where does the US fit in?

Of course, for many Americans the important question is not whether the Canadian or French or British health care models are ideal, or whether Canadians/Britons/French are treated well by them. Rather, their question is whether these programs outperform the American model in some meaningful way, such that their introduction would at least improve the state of affairs. The evidence provides a clear answer to this question as well.

According to the same Commonwealth Fund survey mentioned above, "sicker" US residents are less likely to wait for care than are their Canadian or British counterparts. In all but one dimension of care Americans are more likely to be treated quickly and less likely to wait inordinately long for care compared to Canadians or Britons. Only in the case of access to a doctor when ill was access better in the UK, though not in Canada (Schoen *et al.*, 2005).

And the care received when it was finally delivered in Canada, France, and the UK was not of the same standard. New medical technologies are far more common in the United States than in Canada. A 1998 survey of access to medical technology in the Canadian province of British Columbia and the neighbouring US states discovered a gap in access to high tech medical

treatment (Harriman *et al.*, 1999). A more recent examination of access to MRI machines, CT scanners, and Lithotriptors came to the same conclusion (Graham, 2006). Additionally, a survey of physicians in Australia, Canada, New Zealand, the UK, and the US by the Commonwealth Fund found that physicians in the US were least likely to report shortages of the latest medical and diagnostic equipment in their communities while physicians in the UK and Canada were most likely to do so (Table 1, Blendon *et al.*, 2001). Data from the OECD, discussed above, indicates that Americans enjoy greater inventories of MRI machines and CT scanners than do Canadians, Britons, the French, or even the average OECD nation that maintains a universal access health insurance program.

	New				
	Australia	Canada	Zealand	UK	US
Inadequate access to latest medical and diagnostic equipment in community	13%	63%	29%	47%	8%

Looking at quality from the outcomes side gives a less clear picture on the relative performance of the US health care model. While it is indeed true that many developed nations have lower infant mortality rates and a longer life expectancy, these are not necessarily accurate measures of health system performance. As noted above, such population health measures are determined by a number of factors such as drug use, nutrition, crime, pollution, immigration, and public sanitation in addition to the delivery of health care itself, which makes it difficult to specifically isolate the effect of the health care system.

Measures that are more closely related to the actual performance of the health care program show that US is outperformed in some cases, but that it outperforms in others. For example, a study of mortality amenable to health care, or mortality that could (according to the medical literature) have been avoided through appropriate intervention, finds that the US is outperformed by all three of the comparison nations. This is also the case with the number of potential years of life lost to disease (a measure of a health system's ability to prevent death from disease at younger ages) (Esmail and Walker, 2006a; OECD, 2006; WHO, 2006; calculations by author). On the other hand, a comparison of the incidence of mortality from breast cancer and colorectal cancer shows the US model outperforming all three universal access models considered above (Ferlay *et al.*, 2004; calculations by author).

A study published in the journal *Health Affairs* looking at quality of care in several developed nations confirms that the quality of care in the United States is neither necessarily better nor necessarily worse than that in other developed nations (table 1). Specifically, the study found that the United States outperformed Canada and the UK in some measures of survival and was outperformed in others. Interestingly, the study also found that the UK tended to perform worse than either Canada or the United States, confirming the measures of outcomes above. Unfortunately, this study did not examine data for France.

Table 2: Standardized performance on survival rates in five countries							
Indicator				New			
	Australia	Canada	England	Zealand	US		
Breast cancer	107	104	100	106	114		
Cervical cancer	111	106	100	105	108		
Colorectal cancer	116	113	100	123	108		
Childhood leukemia (ages 0-15)	100	118	109	102	110		
Non-Hodgkin's lymphoma	116	107	100	115	109		
Kidney transplant	106	113	104	104	100		
Liver transplant	110 ^a	123	100	110 ^a	102		
AMI (ages 20-84)	134	100	NA	121	NA		
Ischemic stroke (ages 20-84)	120	124	NA	100	NA		

Note: 100 is the worst result and higher numbers indicate better results.

Source: Hussey et al., 2004.

In total, while the US health care model does cost more than the three universal access models examined above⁶, it also delivers more in terms of the accessibility of treatment and in terms of the quality of treatment (application of medical technology). US patients and individuals also have greater choice in their health insurance plan and in who will provide their care, though there are many government regulations that work to minimize these advantages.

Conclusion

The evidence examined in this short paper suggests that Canada and the UK are clearly not models for health care reform. Canada, despite being the second most expensive universal access health care model in the developed world, delivers poor access to health care and only satisfactory outcomes from the health care process. It is quite clear that Canada's model is an inefficient provider of health care services. The UK is an equally poor model for reform. While it is the least expensive of the models examined here, it provides bottom ranking access and bottom ranking outcomes from treatment. Put simply, the Canadian and British models serve better as examples of what not to do in health care. It is hard to imagine that someone starting from scratch couldn't design a better program than those in both Canada and the UK⁷.

This is not to say that the Canadian and UK experiences are not helpful for Americans. Many American analysts have rightly discovered that some of the biggest problems with the US health care system result not from market failures or happenstance, but from inappropriate government intervention there such as limits on competition from out-of-state insurance providers and tax-preference for employer-provided insurance over individual purchase (see for example: Graham, 2007; Wall Street Journal, 2005; Ernst, 2006; and Herrick, 2007). In this sense, perhaps there is indeed something valuable Americans can learn from the Canadian and British health care models.

France, on the other hand, emerges from this comparison as a model that may be worth considering. It's above average expenditures buy satisfactory health outcomes, poor inventories

^a This figure includes Australia and New Zealand

⁶ On an age-adjusted basis, health expenditures in the United States totaled 17.3 percent of GDP in 2003

⁷ Interestingly, the Canadian health care program was originally based on the British NHS.

of technology but good inventories of physicians, and access to care without waiting lists. France's health care model is based on the concept of an independent non-government insurer providing insurance to the population on a mandatory basis, while care is delivered in a competitive marketplace and is subject to significant co-pays. However, France's poor performance on technology means that it is less an exemplary model and more one that is superior to other poor performing health care programs.

If universal access to health care insurance is deemed to be the goal for health reform, there is another alternative to these three models that should be considered seriously. According to the evidence on access and outcomes examined above, the Swiss model appears to be one that Americans may wish to consider emulating as it provides top-ranking access to care and outcomes from treatment for its top dollar price (Esmail and Walker, 2006a; Esmail, 2006). Specifically, Switzerland ranks near the top in access to physicians, MRI machines, and Lithotriptors, has no queues for treatment, and performs well in outcomes measures like potential years of life lost to disease and the incidence of mortality from breast and colorectal cancer (Esmail and Walker, 2006a). Indeed, many analysts see Switzerland's model as one that could serve as a guide for health reformers in a number of nations.

The Swiss model itself is based on the mandatory purchase of health insurance in a competitive marketplace (involving private insurers¹⁰ and community-rated insurance premiums¹¹ with varying deductibles and insurance arrangements), while care is delivered competitively by both public and private caregivers. Swiss patients are required to share in the cost of their care through co-pays and deductibles, and are permitted to seek care privately, on their own terms, whenever they feel it is necessary to do so (Esmail, 2006). The strong performance of the Swiss health care model—the result of competition in the delivery and financing of health care services and appropriate financial incentives for both providers and patients—as well as its respect for individual choice and preferences, makes it a good choice as a potential model for universal access health insurance reform.

References

Blendon, Robert J., Cathy Schoen, Karen Donelan, Robin Osborn, Catherine M. DesRoches, Kimberly Scoles, Karen Davis, Katherine Binns, and Kinga Zapert (2001). "Physicians' Views on Quality of Care: A Five-Country Comparison." Health Affairs, 20(3): 233-243.

⁸ In France, individuals are able to purchase insurance to cover co-pays, and almost all of the population holds such insurance.

⁹ Data was not available for Switzerland for mortality amenable to health care.

The Swiss are guaranteed free choice of insurance provider and can change their compulsory health-insurance provider up to twice a year depending on the particulars of their health insurance policy. Insurance providers are not allowed to refuse an individual's application for a compulsory health insurance policy and high-risk insureds are cross-subsidized by the entire insurance sector acting as a single cooperative risk pool through a government-controlled mechanism which redistributes funds from companies managing less-risky groups to companies managing more risky groups.

Premiums are the same for each person in a particular region or municipality taking out insurance with a particular company, regardless of individual risk rating.

Ernst, Diana M. (2006). "How Good Health Legislation Dies: the Ongoing Fight to Make Health Care Better and Freer for All Americans." *Health Policy Prescriptions*, 4(7). San Francisco: Pacific Research Institute.

Esmail, Nadeem (2006). "Like Clockwork: The Swiss Health Insurance System." Fraser Forum (June): 23-25.

Esmail, Nadeem and Michael Walker (2006a). *How Good is Canadian Health Care?* 2006 *Report.* Vancouver: The Fraser Institute.

_____ (2006b). Waiting Your Turn: Hospital Waiting Lists in Canada. 16th Edition. Vancouver: The Fraser Institute.

Ferlay, J., F. Bray, P. Pisani and D.M. Parkin (2004). *GLOBOCAN 2002: Cancer Incidence, Mortality and Prevalence Worldwide*, Version 2.0. IARC CancerBase No. 5. Lyon: IARCPress.

Graham, John R. (2007). "Swiss Lessons for American Health Care: More Cheese with Fewer Holes." *Fraser Forum* (February). Vancouver: The Fraser Institute.

Graham, John R. (2006). Deadly Solution: SB-840 and the Government Takeover of California Health Care. San Francisco, CA: Pacific Research Institute.

Harriman, David, William McArthur, and Martin Zelder, with Jared Alexander (1999). *The Availability of Medical Technology in Canada: An International Comparative Study*. Public Policy Sources 28. Vancouver, BC: The Fraser Institute.

Herrick, Devon (2007). Why Are Health Costs Rising? Dallas: National Center for Policy Analysis. Available digitally at http://cdhc.ncpa.org/commentaries/why-are-health-costs-rising.

Hussey, Peter S., Gerard F. Anderson, Robin Osborn, Colin Feek, Vivienne McLaughlin, John Millar, and Arnold Epstein (2004). "How Does The Quality Of Care Compare In Five Countries?" *Health Affairs*, 23(3): 89-99.

Irvine, Carl, Martin Zelder, and Nadeem Esmail (2002). "Medically Uninsured Americans: Evidence on Magnitude and Implications." *Public Policy Sources*, No. 58. Vancouver: The Fraser Institute.

Or, Zeynep (2001). "Exploring the Effects of Health Care on Mortality Across OECD Countries." *Labour Market and Social Policy—Occasional Papers* No. 46. Paris: OECD. Available digitally at www.oecd.org.

Organisation for Economic Cooperation and Development [OECD] (2006). *OECD Health Data* 2006. Version 10/17/2006. CD-ROM. Paris: OECD.

Ramsay, Cynthia, and Nadeem Esmail (2004). "The Alberta Health Care Advantage: An Accessible, High Quality, and Sustainable System." *Public Policy Sources*, No. 81. Vancouver: The Fraser Institute.

Schoen, Cathy, Robin Osborn, Phuong Trang Huynh, Michelle Doty, Kinga Zapert, Jordon Peugh, and Karen Davis (2005). "Taking The Pulse Of Health Care Systems: Experiences Of Patients With Health Problems In Six Countries." *Health Affairs* (Web Exclusive). Available digitally at www.healthaffairs.org.

Siciliani, Luigi, and Jeremy Hurst (2003). "Explaining Waiting Times Variations for Elective Surgery across OECD Countries." *OECD Health Working Papers*, No. 7. Available digitally at www.oecd.org.

Skinner, Brett J., and Mark Rovere (2007). California Dreaming: The Fantasy of a Canadian-Style Health-Insurance Monopoly in the United States. Vancouver: The Fraser Institute.

Starfield, Barbara, Leiyu Shi, Atul Grover, and James Macinko (2005). "The Effects Of Specialist Supply on Populations' Health: Assessing The Evidence." *Health Affairs*, Web exclusive released March 15. Available digitally at www.healthaffairs.org.

Wall Street Journal (2005). *Cheaper Health Insurance: A little competition can go a long way*. Available digitally at http://www.opinionjournal.com/editorial/feature.html?id=110007011.

World Health Organization (WHO) (2006). WHO Mortality Database. March 14, 2006 update. Available digitally at www.who.int.